

Amendments to the Claims:

**Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

*40 B1*  
Claim 1 (currently amended) ~~An antagonist of A-G protein-coupled receptor~~ antagonist of claim 3, which comprises amino acid sequence of the prostaglandin F2 $\alpha$  FP receptor comprising an amino acid sequence selected from the group consisting of ILGHRDYK (PCP-8; SEQ ID NO:1); ~~WEDRFYLL (PCP-10; SEQ ID NO:2); YQDRFYLL 2 (PCP-14; SEQ ID NO:3);~~ ILAHRDYK (PCP-13.7, SEQ ID NO:4); ILGFRDYK (PCP-13.11; SEQ ID NO:5); ILGHKDYK (PCP-13.13; SEQ ID NO:6); ILGHRNYK (PCP-13.14; SEQ ID NO:7); *a3* ILGHQDYK (PCP-13.18; SEQ ID NO:8); ILGHRDY-amide (PCP-13.20; SEQ ID NO:9); ILGHRDYK-amide (PCP-13.21; SEQ ID NO:1); ILGWRDYK (PCP-13.22; SEQ ID NO:10); ILGXRDYK (PCP-13.24; SEQ ID NO:11); and SNVLCSIF (PCP-15; SEQ ID NO:12); ~~and functional peptide analogues thereof,~~ wherein X is cyclohexyl alanine.

Claim 2 (currently amended) A peptide consisting of an amino acid sequence selected from the group consisting of SEQ ID NO:1 and 4 to 12 and wherein said amino acid sequence

contains L- and/or D-amino acid, an amino acid sequence with at least about 90% homology to SEQ ID NO 1 and 4 to 12.

Claim 3 (currently amended) A method for preventing premature delivery of fetus, which comprises the step of administering to a female in need of such treatment a therapeutically effective amount of a ~~a-G protein-coupled receptor~~ the antagonist of claim 1.

Claim 4 (currently amended) A method for preventing and/or treating dysmenorrhea comprising the step of administering to a female in need of such treatment a therapeutically effective amount of a ~~a-G protein-coupled receptor~~ the antagonist of claim 1.

Claim 5 (currently amended) A pharmaceutical composition containing at least one ~~a-G protein-coupled receptor~~ an antagonist of claim 1, mixture thereof, in association with a pharmaceutically acceptable carrier.

Claim 6 (withdrawn).

Claim 7 (withdrawn).

~~Claim 8 (cancelled).~~

~~Claim 9 (cancelled).~~